



The romance of science: An analysis of positivist epistemologies in the New Psychology and Sherlock Holmes

Abigail Dykier-Bela

Supervised by: Dr. Geoff Bunn

April 2011

The romance of science: An analysis of positivist epistemologies in the New Psychology and Sherlock Holmes

ABSTRACT

This study was conceptually aligned with Danziger's (1994) historiography of psychology and aimed to offer a critical reading of the social discursive formations that aided the radicalisation of positivism within psychological epistemology at the Victorian *fin de siècle*. The analysis was concerned with the exploration of common ideological topologies present within the narratives of the New Psychology and Arthur Conan Doyle's Sherlock Holmes stories. Sociocriticism (Angenot, 2004; Cros, 1988) was adopted as a critical analytic approach in the reading of the detective and psychological texts. The New Psychology and Sherlock Holmes were conceptualized as the embodiments of scientific and romantic narratives present within the Victorian social sphere. Visionary, prophetic and messianic themes were identified as constituting both psychological and detective narratives about science. It was argued that Sherlock Holmes and positivist psychology may be read as the romantic articulations of a unified discursive cluster.

KEY WORDS:	SOCIOCRITICISM	POSITIVISM	ROMANTICISM	SHERLOCK HOLMES	FIN DE SIECLE
-------------------	-----------------------	-------------------	--------------------	------------------------	----------------------

The nineteenth century was completely lacking in logic, it had cosmic terms and hopes, and aspirations, and discoveries, and ideals but it had no logic.

-Gertrude Stein, *Wars I Have Seen*

Introduction:

The New Psychology of the late nineteenth century was a disputed science, attempting to rid itself of the disciplinary shadow of philosophy and struggling to establish itself as a legitimate positivist endeavour (Bjork, 1983). The proponents of this new science of the mind were quick to point out not only the empirical basis of positivist psychology, but also its pragmatic utility. In his Presidential Address delivered at the American Psychological Association, James McKeen Cattell prophetically stated that 'experimental psychology has wide ranging practical applications, not only in education but also in medicine, in the fine arts, in political economy and, indeed, in the whole context of life' (1896, p.11). Today, far from being a disputed science, psychology has become the dominant mode of expression available to the modern subject (McLaughlin, 2010). The vision of psychology as indispensable to the government and regulation of society has been fulfilled with perhaps more force than even Cattell could have foreseen.

Since Cattell's time, psychology's authoritative social status has largely depended on the supposition that its methods are those of the natural sciences, and that the objects of its scrutiny are naturally occurring phenomena. Critical scholars have questioned psychology's positivist assumptions by underlining the dichotomy between the discipline's methodology and subject matter. The framework for a differentiation between socially indifferent natural kinds and reflexive human kinds proposed by Hacking (1991; 1995) has made a significant contribution to debates within the social sciences in general and to the re-assessment of psychology's status as a natural science in particular. Historians of psychology have offered extensive discussions of the manner in which the objects of psychological inquiry become produced through discursive practices. Danziger (1997) has employed Hacking's distinction in a critical discussion of the objects of psychological research and the manner in which they are constructed through language and metaphor. He observes that even when psychology's methodology falls within the sphere of the natural scientific tradition, the objects of its study are socially defined human kinds, rather than natural objects.

Historians of psychology have also offered insightful discussions of the manner in which psychology narrates the subjects of its gaze into existence. Danziger (1990) has disseminated the way that the psychological subject is produced by the ways of knowing that are available within the research context. He suggests that psychology cannot make claim to a unified representative subject, as she is constructed by the very methodology that aims to define her. Rose (1996) has likewise examined the ways in which the psychological subject has come to be produced and managed.

Positivist psychology, Rose (p.73) argues, became a successful social practice partly because it promised to individualize public problems by means of quantification. The psychological subject defined by the 'calculable traces' (p.74) of selfhood produced by statistical analyses offered to contain social evil within the boundaries of her newly-invented individuality. Before psychology was able to imagine, quantify and pathologise the modern subject, however, it needed to present itself as a believable science. Leary (1987) has illuminated the intricate rhetorical devices with which the New Psychology argued its case within the academic, governmental and public spheres. Presenting itself through a series of narratives about positivism, psychology was able to attain an air of intellectual authority and believability as a scientific practice.

The shaping of the story that would define the psychology of the turn of the nineteenth century has been extensively analysed by Rylance (2000) in a reading of the various transmutations of psychological knowledge in middle and high Victorian culture. The controversies that surrounded Victorian psychological debates, Rylance (p.4) observes, were many and psychology became a mode of collective self-reflection, its identities fluctuating with those of the society within which it was embedded. Danziger (1990, p.53) distinguishes three research trends that were present at the close of the nineteenth century: Wundt's laboratory experimentation, Galton's anthropometrics and the clinical experiments at Salpêtrière. The institutionalization of psychology as the American Psychological Association in 1892 would cause a filtering out of much of Wundt's philosophy (Danziger, 1979) and would lead psychology onto the path of scientific self-censorship. The diversified psychology of the Victorian middle years was now being replaced by a rigid and orthodox scientism. The New Psychology's break from its philosophical past would be bitter and final (Brožek,1984). Far from presenting a narrative of scientific objectivity, however, the New Psychology's representation of its positivistic values was saturated with romantic imagery. Pearson's statistical work presents one striking example of positivism as the articulations of a romantic notion of ideal knowledge and a higher good (Levine 2002, p.220). The American Psychological Association became the forum for a generation of radically positivist psychologists, who presented themselves as pioneers, founding fathers and seekers of truth. These early psychologists were the guardians of what Münsterberg poetically described as the New Psychology's 'declaration of independence' (1899, p.21) from other areas of the academy.

The New Psychology's intertwining of scientific and romantic narratives was not an isolated phenomenon. Romantic and empiricist discourses appear to have circulated freely between nineteenth-century literary and scientific realms (Morton, 1984; Shuttleworth, 1984; Smith, 2004). Beer's (1983) ground breaking study has illuminated the romantic imagery through which Darwin narrated his ideas, and has drawn attention to the importance of imaginative rhetoric in the construction of evolutionary theory. Psychology seems to have talked itself into existence through the narratives of romanticism and science, and it was this unique discursive pattern that would legitimize it as an academic discipline. The discursive field had, in a

sense, been set throughout the nineteenth century for such a narrative to be formulated. The new, radically positivist psychology tapped into the discourses of science and romance that were present within the social sphere and reflected them back onto the public domain.

At the time that psychology was emerging as a historical event, on the other side of the Atlantic Sherlock Holmes was taking shape as a cultural entity. He was, according to Ackroyd (2001, xiii), not unlike a golem and a 'new form of man'. Sherlock Holmes has certainly defied the divide between the textual and the corporeal in Western social consciousness. Doyle's stories have been identified as the vehicle for the transmission of the Victorian world view (Frank, 1989) and contain much of the scientific discourses available at the close of the century. Leps (1990; 1994) has offered extensive discussions of the narrative transactions through which the Sherlock Holmes stories and nineteenth-century criminology relayed eugenicist and positivist ideologies to the public sphere. Doyle's stories reproduce degenerative and Darwinian (Clausson, 2005) notions of scientific inquiry with such realist conviction that Sherlock Holmes has come to function, according to Lauren (2005, p.104), as a parody of positivism. The connection between Sherlock Holmes and psychology has traditionally been made with reference to psychoanalysis (Ginzburg, 1983; Irwin, 1994; Loewenstein, 1992) and the analyst as detective (Yang, 2010). But Sherlock Holmes has also been described as a social psychologist (Truzzi, 1988) and a participant in post-Darwinian narratives of the mind (Frank, 1999). His Poesque bohemianism (Hodgson, 1992) and cool analytic reason construct him as the embodiment of the romantic ideal of the positivist scientist. Sherlock Holmes brings together, as Saler (2003) suggests, modernity and enchantment.

Sherlock Holmes, like the New Psychology, offered a radical epistemic break with the intellectual traditions that came before him. The pre-Holmesian detective was not an explicitly positivist figure; he was, like Poe's Dupin, a nebulously sketched genius or, like Gaboriau's Lecoq, a character with a criminal past and unremarkable mental powers. British detectives, from Collins' placid Sergeant Cuff to the shady characters narrated in Dickens' novels, present a conspicuously unscientific grouping. The literary detective that inhabits the middle and high Victorian eras is defined by a diverse and conflicting array of characteristics. His identity, like that of psychology, seems to fluctuate together with the ebb and flow of public discourse about science, morality and logic. It is Sherlock Holmes who will define detection as an explicitly positivist endeavour. 'While mid-Victorian detectives warned disappointingly of the limits of human reason', Gilbert (1988, p.379) argues, 'Sherlock Holmes offered practical proof that no such limitations exist.'

Defined by the narratives of science and romance, Sherlock Holmes and positivist psychology appear to function as the embodiments of interdependent discursive patterns. The New Psychology and Sherlock Holmes emerged at the Victorian *fin de siècle*, when 'anxieties about the passing of a century and the advancing of a new age were crystallizing assessments of evolutionary development, national character and the spiritual consequences of scientific progress' (Vrettos, 2002, p.214). Both

the psychologist and the detective appear to personify the very essence of the existential problems that overshadowed intellectual life at the turn of the century: the advance of science and its limits. The new psychology and Sherlock Holmes offered to consolidate into a unified positivist narrative the cacophony of psychological and literary speculation of middle, high and late Victorian discourse. Existing as the personifications of the prevailing intellectual concerns of their time, the New Psychology and Sherlock Holmes may be read as the discursive emanations of the prevailing zeitgeist.

The term 'zeitgeist' has been critiqued as an outmoded remnant of the history of ideas (Gigante, 2007) and as Hegel's greatest intellectual monster (Scruton, 1983, p.167). Historians of psychology in particular have reasons for being suspicious of this rather nebulous concept. Boring's (1950) history of psychology misrepresented the Goethean zeitgeist to such an extent, that the term became synonymous with the inevitability of the triumphant march of positivism through the ages (Ross, 1969). The zeitgeist, however, need not be understood solely not as a monstrosity of Hegelian metaphysics or as Boring's dubious contribution to the history of science. The zeitgeist implies a conceptual fluidity that might provide an intriguing theoretical addition to critical historiographies of psychology. The zeitgeist, positioned outside of social discourse but understood as its ideological product, might be interpreted as embodying not the prevailing sayable of a given historical period but those repressed, silent and unarticulated traces of social desire that compel cultures to create specific narratives about themselves. Such a conceptualisation of the zeitgeist would offer a novel conceptual lens through which to explore the manner in which the New Psychology and Sherlock Holmes came to occupy uniquely privileged positions within social discourse. The fact that both psychology and Doyle's detective merged romantic and scientific narratives into a new positivist story does not seem to explain why these two discursive practices in particular should have been received so readily within the public sphere.

Critical historians of psychology have tended to focus on three broad and converging areas of analysis: the discursive construction of psychological categories, the inscription of the human subject within disciplinary discourse and the language with which psychology first narrated its scientific legitimacy. Both Danziger (1990; 1997) and Rose (1996) provide in-depth historical explorations of the complex set of discursive strategies that were employed in the construction of psychological objects and the invention of the human subject. Leary's (1987) analysis offers a comprehensive survey of the narratives that constructed the New Psychology as a feasible empirical practice. Taken together, the analyses of Danziger, Rose and Leary provide an excellent starting point for the exploration of the ways in which psychology narrated itself as an object within social discourse.

Aiming to offer an examination of the means of discursive production through which the New Psychology and Sherlock Holmes were narrated as believable participants in public discourse, the present study explored the following questions: a) Should the New Psychology and Doyle's detective stories be interpreted as the articulations

of the same discursive structure? b) What were the discursive themes that constructed Sherlock Holmes and positivist psychology as the embodiments of science and romanticism? c) May the social success of the New Psychology and Sherlock Holmes be attributed to the narrative positioning of their shared discursive themes in relation to the Victorian zeitgeist?

Methodology:

Design:

This interdisciplinary study took Danziger's (1994) critical historiography of psychology as its conceptual basis. The reading of the materials was guided by Angenot's (2004) discursive and Cross' (1988) microsemiotic approaches to sociocriticism.

Materials:

The materials chosen for this study were Doyle's Sherlock Holmes stories (see Appendix 1a) and scientific publications associated with the New Psychology (see Appendix 1a). The literary and psychological texts chosen for this analysis were published between 1885 and 1901.

Theoretical Background:

Sociocriticism

Social Discourse Analysis

Sociocriticism, which bases many of its assumptions on Goldmann's (1981) sociological view of literature, engages in a diverse set of analyses and has derived its theoretical basis from Foucauldian, Bakhtinian and Marxist thought (Barsky, 2004). Drawing on Lévi-Strauss (1966), Angenot has constructed an analytic approach that is a *bricolage*, an extensive reading of texts that aims to capture and outline various narrative and ideological formation that emerge at particular moments in history. Angenot's (2004) social discourse analysis is an attempt to 'extrapolate transdiscursive rules, to discover vectors of exchange, to set up a global topology of the prevailing sayable' (p.206). Taking social discourse to encompass the totality of what is articulated within a particular historical context (p.207), Angenot's discursive approach appears to offer a particularly appropriate analytic lens through which to view the construction the New Psychology as a discursive object.

Microsemiotics

Cros' (1988, p.76-93) microsemiotic approach to sociocriticism was employed in the exploration of the discursive relationship between the textual materials and the

concept of the zeitgeist. Cros has expanded on Kristeva's (1984) discussions of genotext and phenotext to formulate a discursive axis of social discourse. Cros (p.78) is interested in examining the traces that ideology leaves behind as it transforms itself from the possibilities of a discursive field into the sayable within a discursive formation. Presenting a critical tool for the dissemination of the specific narrative links that bind individual discursive phenomena to the ideologies that prevail within the social sphere, this sociocritical approach presented an excellent conceptual vantage point from which to survey the selected literary and psychological materials.

History and Psychology

Smith (1988) describes a historiography of the social sciences that is, in Foucauldian terms, relevant to present epistemological concerns and allows for the conceptualization of possibilities alternative to positivist testimonies. On a similar archaeological note, Rose (1996) argues for a critical history that 'disturbs and fragments...reveals the fragility of that which seems solid (p.41)'. Historical analyses of psychology offer a critical perspective not only on what, if any, type of science it is, but also on how its present epistemology may be transformed for the benefit of its future. Danziger's (1990; 1997) Foucauldian reappraisals of psychology have significantly unsettled the discipline's experimentalist mythologies. But Danziger (1994) has done something far more scandalous than simply call psychological categories discourse and psychological method a disciplinary practice; he has proposed that psychologists undertake to write their critical histories themselves. What this suggests is a historiography in action and an interdiscursive exchange between what psychology used to be and what it may become. The present study attempted to carry out a critical historical analysis that placed itself between the past and the present with a view to making a critical contribution to psychology's future (see Appendix 4 for an outline of the analytic procedure).

Analysis:

Social Discourse

More than a decade before Sherlock Holmes and the New Psychology materialised as historical entities, the British poet Matthew Arnold was grappling with the increasingly dominant presence of scientific certainty in intellectual life.' For it is', wrote Arnold in *Literature and Dogma* (1873), 'what we call the Time-Spirit, which is sapping the proof from miracles,-it is the "Zeit-Geist" itself'. It seems fitting that Arnold, who is often considered to be the quintessential Victorian poet of loss (Harrison, 2010, p.29), should have equated disenchantment with the scientific zeitgeist.

The relinquishing of religious belief, the departure of god as a viable social figure and the industrialization of the cities are some of the variant themes that constitute the

background upon which Victorian aesthetic sensibilities were built (Watson, 1982). From the nostalgia of the Pre-Raphaelites to the existential terrors that haunted Dowson, loss and doubt dominate the aesthetic preoccupations of Victorian poets, writers and artists. Within this discourse of loss, science figures prominently alongside questions of morality, religion and death. It seems that science tends to be represented mainly in conjunction with these other philosophical concerns, rather than as an object of admiration or objection in itself.

Angenot (2004, p.207) defines social discourse as 'thoroughly made out of *regulated antagonisms* between conflicting images, concepts, cognitive discrepancies and incompatibilities that are still relatively stabilized without reaching a level of equilibrium'. Nineteenth-century science and religion appear to exemplify this type of regulated antagonistic duet. It is often suggested that the steady march of scientific discovery and technological development plunged the Victorian creative impulse into an aesthetic of loss, doubt and decay (Kalla, 1989). It is difficult, however, to speak of a clear opposition between theology and scientific progress in Victorian social discourse (Melnyk, 2008; Wheeler, 1990). By the high Victorian era, science and the Judeo-Christian tradition appear to function not as opposite epistemological forces but as a stabilised conflicting image within literary and social discourse.

Sherlock Holmes and the New Psychology: A tinkering of Common Themes:

The New Psychology and Sherlock Holmes appear to have narrated themselves into believability by means of two overarching narratives: the discourse of the visionary and the discourse of the messiah. Alluding to the imagery of founding fathers, explorers and pioneer settlers, the visionary discourse painted a romantic sketch of the psychologist and detective as brave heroes whose duty took them to the very frontiers of scientific discovery. The messianic discourse constructed the psychologist and detective as divine seers, a Christ-like teachers and guardians of order in a disordered world.

The Visionary Discourse

The visionary discourse within psychology and the Holmes stories was found to be comprised of two central narratives: a separation from the past and a celebration of the positivist present. Although the new psychologists often represented their work as the inevitable product of scientific progress, their efforts were concentrated on establishing experimental psychology as a legitimate academic discipline (Buckley, 1989, pp.20-26). This meant that a series of either implicit or explicit attacks on earlier psychological epistemologies would be inevitable. 'We are not called upon to defend them,' writes Dewey (1884, p.280) of his predecessors' for their work is in the past; we are not called upon to attack them, for *our* work is in the future.'

When Sherlock Holmes first leapt off the pages of the Strand Magazine, he too made a point of setting himself apart from the intellectual traditions that came before him. Having denounced Dupin as a 'very inferior fellow' (1887/1981, p.25), Doyle's sleuth

offers this opinion of Gaboriau's creation: 'Lecoq was a miserable bungler ... That book made me positively ill (p.25)'. Sherlock Holmes is, as he himself tells us 'the only consulting detective-there is no other' (p.27). He has, like the New Psychology, established a distinct tradition of his own. Holmes is conceptually free from the restraints and ineptitudes of his predecessors and offers a 'science of deduction' that claims to be 'as infallible as the propositions of Euclid' (p.23).

Once past traditions are repudiated, it is possible for the New Psychology and Sherlock Holmes to expound on their improved methodologies. For the new psychology, the stakes were high; its existence depended on its ability to present itself as an applicable science. 'Experimental psychology' Cattell (1890, p.373) would pronounce, 'teaches accurate observation and correct reasoning in the same way as the other natural sciences, and offers a supply of knowledge interesting and useful to everyone.' In his presidential address, Cattell (1885) ventures so far as to suggest that positivist psychology was superior to the natural sciences in its exactness:

The apparatus used ... in the psychological laboratory ... has this year been borrowed by professors in the physical department to measure the rate of fall of bodies in liquids, and it has resulted that the constancy of the physical motions is less than that of the psychophysical processes. (p.9)

The New Psychologists presented elaborate descriptions of their technologically innovative apparatus and the natural scientific artefacts that could be found in their laboratories. Describing the Harvard laboratory, Münsterberg (1893) proudly outlines the innovative medico-technological objects that may be found within its walls:

We have fine laboratory rooms, we have the most ample and complete collection of psychological apparatus in the world ... Costly models of the brain, eye, and ear, all with detachable parts, valuable models of nerve paths, fine preparations in wax, dissected parts in alcohol, etc. -- all are here (p.206).

The New Psychology's labs, filled with measuring machines, body parts in formaldehyde and models of the human brain presented a formidable spectacle of science. The employment of physical measurement and the prodding and probing of artificial nerve endings served as the stage setting upon which psychology told its new story and transformed itself from a science of the soul into a science of the brain.

Sherlock Holmes, a positivist of the first calibre, also relies on chemistry and anatomy for his deductive work. The reader first encounters him in a dissecting room, where he is reported to have been 'beating corpses with a stick' and cataloguing the resulting bruising patterns (1887/1981, p.17). 'I generally have chemicals about', he tells Watson when they first meet, 'and occasionally do

experiments.' Chemical solutions, specialist apparatus and anatomical objects serve as the props with which Holmes is narrated as a believable scientific expert. Although Holmes' business is that of abstractly examining the subjective motives of crime, his methods are pragmatic and positive. 'My theories', he pronounces, 'are extremely practical-so practical that I depend on them for my bread and cheese' (p.24).

Sherlock Holmes' methods of observation yield spectacular results. 'From a drop of water', he claims, 'a logician could infer the possibility of an Atlantic or a Niagara without having seen or heard of one or the other' (p.23). Deduction as practiced by Holmes is a process of discreet observation, a way of bringing the intangible to light by means of barely perceptible evidence. The method, which Watson initially dismisses as 'infernal twaddle' is presented by Holmes as the ultimate scientific answer to the hurdles of policing and criminology. The New Psychology also makes scientific inferences from subtle signs and cues. Cattell (1890, p.374) writes of the objects of psychology's study: 'The just noticeable sensation and the least noticeable difference in sensation are psychological constants of great interest.'

The Messianic Discourse

Holmes' unique reasoning powers place him in a position of divine omnipotence. His gaze penetrates the psyche of his clients with uncanny precision, illuminating their secrets and uncovering their motives. When Holmes notices a young woman hesitating on the pavement outside of his door, he directs his gaze down at her from the Baker Street window and offers a diagnosis:

I have seen those symptoms before ... Oscillation upon the pavement always means an affair de coeur. She would like advice, but is not sure the matter is not too delicate for communication ... When a woman has been seriously wronged by a man she no longer oscillates, and the usual symptom is a broken bell wire (1891/1981, p.192).

Divine and all-seeing, Sherlock Holmes in a matter of seconds reads the thoughts of his client and interprets her symptoms. The New psychology's experimental gaze was also geared towards the diagnosis of individual states of mind. 'The study of symptoms and abnormal states of every type and degree' writes Hall (1885, p. 129),' has also lately received new input, a successful student of these states' should pose 'the rare combination of an insinuating, sympathetic temper, of a perhaps itself infinitesimally neurotic type, with power to trace all morbid psychic phenomena in others'. The power to recognize and locate psychic phenomena in their entirety, however, is not the limit of psychology's positivist vision. 'The study of children's minds,' Dewey (1884, p.280) proposes, 'the discovery of their actual thoughts and feelings from babyhood up, the order and nature of the development of their mental life ... promises to be a mine of greatest value.' Equating observation with discovery, Dewey suggests that the experimental gaze may penetrate the 'actual' thoughts and inner feelings of children. Here the psychologist becomes the divine seer, whose

expert gaze illuminates not only the processes of the mind, but the thoughts which are contained within it.

The positivist psychologists and Sherlock Holmes take on the role of sages and teachers. Without the insight offered by Holmes, Scotland Yard would arguably never solve a single case of murder. Holmes' teachings are necessary for the successful running of the British legal system and for the individual welfare of his perplexed clients. The proponents of the New Psychology were also interested in appropriating a didactic role within the public sphere and presented their expertise as essential to the well-being of institutions and individuals alike: 'How can the judge estimate mental acts,' Münsterberg demands (1893, p.209), 'how can the preacher influence the spiritual life, how can the statesman understand social needs, if he has never taken the pains to comprehend the laws and the phenomena of mind?'. It is the task of the new psychologists to bring the message of truth and positivist revelation to the statesmen and the preachers. Without the indispensable expertise of psychology, Münsterberg seems to be saying, the orderly administration and fair organisation of society would be impossible.

Microsemiotics

The themes that emerged from the detective and psychological texts were placed on Cros' genotext axis (see figure 1). In his theoretical discussions of sociocriticism, Cros (1988, p.76) has imagined two axes of social discourse. Within this special metaphor, he has placed interdiscourse on the vertical axis and the intertext on the horizontal axis. The interdiscursive axis is understood by Cros (pp.76-76) to hold ideological formations and the codes for their mediation between the social and textual spheres. The intertext exemplifies the pre-coded and pre-constrained structures of expression available within social discourse. At the point of intersection between interdiscourse and intertext, Cros has inscribed the genotext. Cros' genotext is the discursive space where intertext and interdiscourse meet and produce new forms of ideological structures. The genotext is a semiotic entity without a corpus and may be understood to be the idea, the not-yet-materialised novel form of expression. The codes and meanings inscribed within the genotext are articulated through the material manifestation of phenotextual structures. The genotext and the phenotext are thus two planes on which the creative product interacts with and is constructed by the social discourse within which it is contained.

For the purpose of the present study, Cros' terminology was extended and the term 'genotext' was understood to incorporate within its discursive remit, alongside individual artistic products, intellectual movements and literary genres.

The New Psychology and the Sherlock Holmes stories were found to share a unified genotextual structure (see Figure 1 in Appendix 3). When placed on the discursive axis adopted from Cros (1988), the themes extrapolated for the psychological and detective texts suggested that Sherlock Holmes and the New Psychology functioned as the phenotextual materialisations of the same set of interdiscursive and

intertextual formations. On the interdiscursive axis, the dominant ideology found to underpin both the New Psychology and the Sherlock Holmes stories was that of positivism. The preconstraint of the interdiscursive axis that intersected with positivist ideology was romantic discourse.

Zeitgeist

Cros' (1988) genotext axis was further expanded to incorporate the concept of the zeitgeist (see Figure 1 in Appendix 3). Angenot's 'regulated antagonisms' were positioned next to the intersecting point of the genotext, and between the interdiscursive and inter-textual axes. Identified in the initial analysis as one of the dominant regulated antagonisms of the Victorian era, the binary opposition between science and religion was used as the ideological clue as to the positioning of the zeitgeist within public discourse. The zeitgeist was imagined as the discursive residue formulated by the various antagonistic exchanges that take place between conflicting points of view within the sphere of social discourse (see figure 1). In the case of science and religion, what appears to be left behind by antagonistic exchanges are the narratives of loss, doubt and uncertainty. Because the polemic between science and theology is regulated and prevented from reaching a point of settlement, it may be seen to exemplify an instance of the sayable, the thinkable or the allowed within social discourse. Conversely, the discursive traces that are left behind by this interchange may be understood to be those components of social discourse that have been rendered unsayable and unthinkable. It is within this marginal space where the unthinkable is produced and discarded by various regulated antagonisms that the zeitgeist may be found. Thus conceptualized, the zeitgeist becomes the silent and repressed preoccupation of a particular historical era or context; it is the 'other' of ideology. The zeitgeist may also be understood to be the prevailing existential longing or desire that remains unfulfilled as long as discursive antagonisms, such as religion and science, remain prevented from reaching a state of consensus. The Victorian zeitgeist may thus be seen to be defined by doubt, and to embody a prevailing social longing for certainty.

Discussion:

The New Psychology and Sherlock Holmes present two articulations of the same enchanting story about science. Leps (1990; 1994) has established the presence of persuasive discursive links between the discursive structures of nineteenth-century criminology and the Sherlock Holmes stories. Holmes, Leps argues, crystallized Victorian criminological discourse and offered a mode for the transmission of its ideology. It seems that when paired with the New Psychology, Sherlock Holmes functions not as the solidification of experimentalist epistemology or, as Lauren (2005, p.104) has suggested, its parody, but as its literary doppelgänger. Relying upon a shared set of discursive themes, the psychologist and the detective may be seen as interchangeable romantic personas. The visionary, pioneering and messianic messages conveyed by Cattell, Hall, Münsterberg and Dewey are articulated also by Doyle's detective. The New Psychology and Sherlock Holmes

appear to have employed similar narrative strategies in the presentation of their positivist narratives. Both begin with a repudiation of their predecessors, both present their methodologies as infinitely applicable, both narrate themselves possessing unique mental qualities and both bring their indispensable expertise to their contemporaries.

Victorian social discourse presented a catholic web of contradictory narratives relating to science, religion and morality (Rylance, 2000). The regulated antagonism between science and religion produced a zeitgeist that was filled with a nostalgic longing for certainty. The spirit of the time that Arnold (1873) saw as sapping the proof out of miracles was neither a final scientific revelation of truth, nor the force that would render religion useless. Arnold's zeitgeist seems to have disenchanted, rather than annihilated theology. The New Psychology and Sherlock Holmes radicalized positivism and brought one primary message to the world: science was the ultimate answer. By narrating scientific methodology as a received higher truth, the New Psychology and Sherlock Holmes not only poured the sap of life back into miracles, but also re-defined the miraculous as belonging within the remit of science. When Holmes infers a Niagara out of a drop of water (1887, p.25) or when Dewey (1884) attempts to uncover the very thoughts of children, they are both performing miraculous feats of human reason; feats made possible by the awesome power of the scientific method.

The New Psychology and Sherlock Holmes became successful social entities because they romanticised science through the evocative language of prophecies and visions, and because they brought a message of blind scientific certainty into a zeitgeist of loss and doubt. By presenting themselves as seekers of truth and scientific heroes, the psychologist and the detective filled the nostalgic Victorian desire for re-enchantment, while the discourse of finality with which the New Psychology and Sherlock Holmes narrated their empiricist message fulfilled the era's longing for a resolute statement of existential finality. The unique combination of romanticism and positivistic faith allowed the New Psychology to legitimize itself as a valid scientific practice and imprinted Sherlock Holmes into Western cultural discourse. It appears reasonable to suggest that at no other time in history could positivist psychology and Sherlock Holmes become such great social institutions. The stories told by the proponent of the science of detection and the popularisers of the science of psychology filled a specific socio-cultural void. Positivist psychology's epistemological assumptions and methodological approach appear to have been of secondary importance in its social legitimization as an academic discipline. It was not the content of the story presented by Cattell and others, but its aesthetic formulation that weaved positivist psychology into the fabric of social life. The New Psychology tapped into the unarticulated longings and hidden existential obsessions of the Victorian zeitgeist and promised to resolve them once and for all.

Historians of psychology (eg. Danziger, 1990; Rose, 1996; Leary, 1987) have offered illuminating discussions of the ways in which psychology produces and organises the objects of its inquiry. The present study interpreted psychology to function not as a

producer of social knowledge, but as one of its products. Understanding psychology as an object within social discourse offers intriguing avenues for further historical analyses. Conceptualising psychology's social legitimacy as contingent on the same discursive structures that rendered Sherlock Holmes a believable participant in Western culture, would allow historians of the social sciences to articulate novel understandings psychology's status in society. The introduction of the *zeitgeist* into critical scholarship as a valid analytic term could likewise open up new possibilities for in-depth interrogations of the manner in which certain ideologies emerge as historical events and become entrenched within social discourse.

Note on Limitations:

The present study aimed to offer a glimpse of the discursive commonalities present within the New Psychology and the Sherlock Holmes stories. The scale of the analysis was small and the choice of materials relatively modest. More in-depth analyses of the various discursive formations that bind psychological and detective epistemologies to a shared narrative would be likely to unearth a rich web of discursive links between scientific psychology and social discourse. Further investigations may benefit from a closer analysis of the different varieties of positivist epistemologies and literary, poetic and artistic styles that were present within, and beyond, the historical moment of the Victorian *fin de siècle*. Grant Allen's female fictional detectives and early twentieth-century Eugenic feminist epistemology present one intriguing interdiscursive cluster that invites further socio-historical research.

The *zeitgeist*, as imagined within the context of Cros' (1988) microsemiotic approach, would provide a theoretically provocative starting point for future studies of nineteenth-century psychological discourse, as well as other interdiscursive (and romantic) alliances between science, literature and the *zeitgeist*.

Reflexive Analysis:

Smith (1997) poses the question of whose voice historians of the human sciences speak in. He observes that in this particular historical domain, where disciplinary affiliations remain unclear, the historian's voice 'speaks individually and wilfully' (p.26). This wilful voice, unattached to convention and liberated by the ambiguity of its disciplinary belonging, appears to have been given new possibilities of expression. The question of voice is the question of agency both for the researcher and for those whose words she has collected as artefacts of social discourse. The historian of the human sciences must be on her guard; she is surrounded by the seductions of ideology. The New Psychology, arguing its case with passion and inviting its readers to side with its positivist cause, offered various seductions and ideological traps. Relaying the story of Cattell, Hall, Dewey and others required a constant re-assessment of the socio-political consequences that their fantastic dreams and great visions produced. Psychology's history is, to some extent, a history of horrors. Intelligence, race, gender, personality may be said to be the

monstrous creations of a particular type of positivist imagination. The researcher attempted to engage with the New Psychology's creative imagination without forgetting the destructive socio-political power of its products. The historian's voice should never become settled, comfortable or unified through a single narrative. The historian of psychology should disturb and become disturbed by the texts she reads; she must allow herself to be horrified by the voices with which her discipline narrated its grand imperialist scheme.

References:

- Ackroyd, P. (2001). Introduction. In A.C. Doyle, *The Sign of Four* (vii-xviii). London: Penguin.
- Angenot, M. (2004). Social discourse analysis: Outlines of a research project. *The Yale Journal of Criticism*, 17(2), 199-215.
- Arnold, M. (1970). *Literature and Dogma: An Essay Towards a Better Apprehension of God*. Oxford: Oxford University Press (Original Published 1897).
- Barsky, R. (2004). Introduction: Marc Angenot and the scandal of history. *The Yale Journal of Criticism*, 17(2), 163-182.
- Beer, G. (1983). *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*. London: Routledge & Paul.
- Bjork, D.W. (1983). *The Compromised Scientist: William James and the Development of American Psychology*. New York: Columbia University Press.
- Boring, E.G. (1950). *A History of Experimental Psychology* (2nd edn). New York: Appleton.
- Brožek, J. (Ed.) (1984). *Explorations in the History of Psychology in the United States*. London: Associated University Press.
- Buckley, K.W. (1989). *Medical Man: John Broadus Watson and the Beginnings of Behaviourism*. New York: Routledge.
- Cattell, J.M. (1890). Mental tests and measurements. *Mind*, 15, 373-381.
- Cattell, J.M. (1893). Survival of the Fittest and Sensation-Areas. *Mind*, 2, 505-508.
- Cattell, J.M. (1896). Address of the president before the American Psychological Association. *Psychological Review*, 3, 134-198.
- Claussion, N. (2005). Degeneration, fin-de-siècle gothic and the science of detection: Arthur Conan Doyle's *The Hound of the Baskervilles* and the emergence of the modern detective Story. *JNT: Journal of Narrative Theory*, 35(1), 60-87.
- Cros, E. (1988). *Theory and Practice of Sociocriticism*. Minneapolis: University of Minnesota Press.
- Danziger, K. (1979). The positivist repudiation of Wundt. *Journal of the History of the Behavioral Sciences*, 15(3), 205-230.

- Danziger, K. (1990). *Constructing the Subject: Historical Origins of Psychological research*. Cambridge: Cambridge University Press.
- Danziger, K. (1994). Does the history of psychology have a future? *Theory & Psychology*, 4(4), 467-484.
- Danziger, K. (1997). *Naming the Mind: How Psychology Found Its Language*. London: Sage.
- Dewey, J. (1884). The new psychology. *Andover Review*, 2, 278-289.
- Dewey, J. (1886). The psychological standpoint. *Mind*, 11, 153-173.
- Doyle, A.C. (1887/1981). *A Study In Scarlet*. In C. Morley (Ed.) *The Penguin Complete Sherlock Holmes* (pp.5-107). Hammondsworth: Penguin.
- Doyle, A.C. (1891/1981). "A Case of Identity". In C. Morley (Ed.) *The Penguin Complete Sherlock Holmes* (pp.192-199). Hammondsworth: Penguin.
- Yang, A. (2010) Psychoanalysis and detective fiction: A tale of Freud and criminal storytelling. *Perspectives in Biology and Medicine*, 53(4), 596-604.
- Frank, L. (1989). The gravel page: Lyell, Darwin and Doyle. *Nineteenth-Century Literature*, 44(3), 364-387.
- Frank, L. (1999). *The Hound of the Baskervilles*, the man on the tor and a metaphor for the mind. *Nineteenth-Century Literature*, 54(3), 336-375.
- Gigante, D. (2007). Zeitgeist. *European Romantic Review*, 18(2), 265-272.
- Gilbert, E.L. (1988). Detective. In J.C. Siegneuret (Ed.) *Dictionary of Literary Themes and Motifs*. Westport, CT: Greenwood.
- Ginzburg, C. (1983). Morelli, Freud and Sherlock Holmes: Clues and scientific method. In U. Eco and T. Sebeok (Eds.) *The Sign of Three: Dupin, Holmes, Pierce* (pp.81-118). Indianapolis: Indiana University Press.
- Goldmann, L. (1981). *Method in the Sociology of Literature*. Blackwell: Oxford.
- Hacking, I. (1991). A tradition of natural kinds. *Philosophical Studies*, 61(1-2), 109-126.
- Hacking, I. (1995). The looping effects of human kinds. In D. Sterber, D. Permack and A.J. Permack (Eds.) *Casual Cognition: A Multidisciplinary Debate* (pp.351-383). Oxford: Oxford University Press.
- Hall, S.G. (1885). The new psychology. *Andover Review*, 3, 293-248.

Hodgson, J. (1992). The recoil of "The Speckled Band": Detective story and detective discourse. *Poetics Today*, 13(2), 309-324.

Harrison, A. (2010). *The Cultural Production of Matthew Arnold*. Athens, OH: Ohio University Press.

Irwin, J.T. (1994). *The Mystery to a Solution: Poe, Borges and the Analytic Detective Story*. London: John Hopkins University Press.

Kalla, K.L. (1989). *The Mid-Victorian Literature of Loss and Faith*. New Delhi: Mittal.

Kristeva, J. (1984). *Revolution in Poetic Language*. New York: Columbia University Press.

Lauren, C. (2005). On the border: Writing scientific texts and fiction. In G. Cortese and A. Duszak (Eds.) *Identity, Community, Discourse: English in Intercultural Settings* (pp.95-138). Bern: Peter Lang AG.

Leary, D.E. (1987). Telling likely stories: The rhetoric of the New Psychology, 1880-1920. *Journal of the History of the Behavioural Sciences*, 23(4), 315-331.

Leps, M.C. (1990). Narrative means: The Sherlock Holmes stories ad narrative text/context. In J. Picchione and L. Pietropaolo (Eds.) *Italian Literature in North America: Pedagogical Strategies* (pp.24-33). Ontario: Bilioteca di Quaderni.

Leps, M.C. (1992). *Apprehending the Criminal: The Production of Deviance in Nineteenth-Century Discourse*. London: Duke University Press.

Leps, M.C. (2004). Critical productions of discourse: Angenot, Bakhtin, Foucault. *The Yale Journal of Criticism*, 17(2), 263-286.

Levine, G. (2002). *Dying to Know: Scientific Epistemology and Narrative in Victorian England*. Chicago: University of Chicago Press.

Lévi-Strauss, C. (1966). *The Savage Mind*. London: Weidenfeld & Nichols.

Loewenstein, E. (1992). The Freudian case history: A detective story or a dialectical progression? Reflections on psychoanalytic narratives from a Lacanian perspective. *Psychoanalytic Psychology*, 9, 49-59.

McLaughlin, K. (2010). Psychologisation and the construction of the political subject as vulnerable object. *Annual Review of Critical Psychology*, 8, 63-79. Retrieved from <http://www.discourseunit.com/arcp/arcp8/arcp8mclaughlin.pdf>

Melnyk, J. (2008). *Victorian Religion: Faith and Life in Britain*. Westport, CT: Praeger.

Morton, P. (1984). *The Vital Science: Biology and the Literary Imagination*. London: Allen and Unwin.

Münsterberg, H. (1893). The new psychology and Harvard's equipment for teaching it. *Harvard Graduate Magazine*, 1(2), 201-209.

Münsterberg, H. (1899) Psychology and history. *Psychological Review*, 6(1), 1-31
Rose, N. (1996). *Inventing Our Selves: Psychology, Power and Personhood*. Cambridge: Cambridge University Press.

Ross, D. (1969). The "zeitgeist" and American psychology. *Journal of the History of the Behavioral Sciences*, 5(3), 256-262.

Rylance, R. (2000). *Victorian Psychology and British Culture 1850-1880*. Oxford: Oxford University Press.

Saler, M. (2003). 'Clap if you believe in Sherlock Holmes': Mass culture and the re-enchantment of modernity, c. 1890-c. 1940. *The Historical Journal*, 46, 599-622.

Scruton, R. (1983). *The Aesthetic Understanding: Essays in the Philosophy of Art and Culture*. New York: Methuen.

Shuttleworth, S. (1984). *George Eliot and Nineteenth-Century Science: The Make-Believe of a Beginning*. Cambridge: Cambridge University Press.

Smith, R. (1997). History and the history of the human sciences: What voice? *History of the Human Sciences*, 10(3), 22-39.

Smith, A. (2004). *Victorian Demons: Medicine, Masculinity and the Gothic at the fin-de-siècle*. Manchester: Manchester University Press.

Truzzi, M. (1983). Sherlock Holmes: Applied social psychologist. In U. Eco and T. Sebeok (Eds.) *The Sign of Three: Dupin, Holmes, Pierce* (pp.55-80). Indianapolis: Indiana University Press.

Vrettos, A. (2002). Dying twice: Victorian theories of déjà vu. In A. Anderson and J. Valente (Eds.) *Disciplinary at the Fin de Siècle* (pp.196-219). Princeton: Princeton University Press

Watson, J.R. (Ed). (1982). Introduction. *Everyman's Book of Victorian Verse*. London: Guernsey.

Wheeler, M. (1994). *Heaven, Hell and the Victorians*. Cambridge: Cambridge University Press.